

Application Serial No. 10/023,857



Attorney Docket No. 088305-0142

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant: James JEANNETTE et al.

Title: AUTOMATED METHOD, SYSTEM, AND SOFTWARE FOR  
TRANSFORMING DATA BETWEEN EXTENSIBLE MARKUP  
LANGUAGE FORMAT AND ELECTRONIC DATA  
INTERCHANGE FORMAT

Appl. No.: 10/023,857

Filing Date: 12/21/2001

Examiner: R. Stevens

Art Unit: 2162

**APPEAL BRIEF**

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Board of Patent Appeals and Interferences  
United States Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

The following is the Appellant Appeal Brief under the provisions of 37 C.F.R. 41.37.

**I. REAL PARTY IN INTEREST**

GXS, Inc. is the real party in interest.

**II. RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any related appeals or interferences.

**III. STATUS OF CLAIMS**

In the final Office Action dated October 16, 2006, claims 1-5, 10-14, 19-25, 27, 28, 33-39, 44-49, 51-58, 60-64, and 66-72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application publication No. 2002/0099735 to Schroeder et al. (hereafter "Schroeder") in view of U.S. patent 6,823,495 to Vedula et al. (hereafter "Vedula"). Claims 1, 13, 27, 39, 49, 58 and 64 are the subject of this Appeal Brief.

**IV. STATUS OF AMENDMENTS**

An Amendment is being filed concurrently with this Appeal Brief. That amendment is similar to the non-entered Amendment and Reply filed on December 4, 2006, but which cancels all of the dependent claims, such that the Amendment does not raise any new issues that would require further consideration and/or search.

**V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The present invention allows for document data in an EDI format to be translated to document data in an XML format automatically, and vice versa, whereby this can be done easily and quickly. That way, a user (e.g., a trading partner) does not have to spend significant time creating complex maps that are required to translate documents received from other companies, whereby those documents are of a different format than the ones used by the company of the user. See, for example, paragraph 0080 of the specification.

Claims 1, 13, 27, 39, 49, 58 and 64 are independent claims. Specifically, independent claim 1 recites:

A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents by a trading partner comprising the steps of:

receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;

generating from the standard data model, by the trading partner, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the step of generating data definitions comprises receiving user input of an EDI standard, a version of the standard, a transaction set, and mapping rules for the standard data model.

Support for the receiving step may be found in step 505 in Figure 5 of the drawings, and in paragraphs 0077 and 0079 of the specification.

Support for the generating data definitions step may be found in paragraphs 0006, 0007 and 0066 of the specification.

Support for the generating self-describing markup language step may be found in step 305 in Figure 3 of the drawings, and in paragraphs 0067 and 0068 of the specification.

Support for the automatically generating an EDI document step may be found in paragraphs 0071 and 0080 of the specification.

Support for the generating data definitions step of the first wherein clause may be found in paragraphs 0067 and 0068 of the specification.

Support for the generating data definitions step of the second wherein clause may be found in paragraph 0066 of the specification.

The benefits of the method of claim 1 are described in the specification as follows:

“An advantage of this invention is that data in the EDI format is translated to data in the XML format, and/or data in the XML format is translated to data in the EDI format automatically, easily and quickly. A benefit is that the user does not have to spend significant time creating the complex maps that are required, for example, in other prior art systems. This approach speeds up the process of developing XML/EDI maps and getting them into production use. Another important benefit of this invention is that businesses are able to quickly integrate their EDI applications with newer XML applications related to EDI.” (paragraph 0080 of the specification).

Independent claim 13 recites:

A system for automatically generating Electronic Data Interchange (EDI) documents by a trading partner, the system comprising:

a standard data model comprising EDI related data of a plurality of transactions;

a computer implemented first generator that generates, from the standard data model, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

a computer implemented second generator that generates self-describing markup language data using a data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to the EDI; and

a computer implemented translator that automatically generates an EDI document based on the self-describing mark up language data,

wherein the first generator generates, for each of the plurality of transactions, data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the first generator further comprises a user interface for user input of an EDI standard, a version of the standard, and a transaction set prior to generating the EDI document.

Support for the standard data model element may be found as Element 215 in Figure 2 of the drawings, and in the description of that element in the specification.

Support for the first generator element may be found as Element 200 in Figure 2 of the drawings, and in the description of that element in the specification.

Support for the second generator element may be found as Element 245 in Figure 2 of the drawings, and in the description of that element in the specification.

Support for the translator element may be found as Element 205A and Element 210B in Figure 2 of the drawings, and in the description of those elements in the specification.

Support for the features regarding the generation of data definitions by the first generator in the first wherein clause may be found in paragraphs 0067 and 0068 of the specification.

Support for the user interface features regarding the first generator in the second wherein clause may be found in paragraph 0066 of the specification.

Independent claim 27 recites:

Program code on a computer readable medium, that is executable by a computer for generating Electronic Data Interchange (EDI) documents by a trading partner, the program code configured to cause the computer to perform the following steps:

receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;

generating from the standard data model, by the trading partner, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the step of generating data definitions comprises receiving user input of an EDI standard, a version of the standard, a transaction, and mapping rules for the standard data model.

Support for the receiving step may be found in step 505 in Figure 5 of the drawings, and in paragraphs 0077 and 0079 of the specification.

Support for the generating data definitions step may be found in paragraphs 0006, 0007 and 0066 of the specification.

Support for the generating self-describing markup language step may be found in step 305 in Figure 3 of the drawings, and in paragraphs 0067 and 0068 of the specification.

Support for the automatically generating an EDI document step may be found in paragraphs 0071 and 0080 of the specification.

Support for the generating data definitions step of the first wherein clause may be found in paragraphs 0067 and 0068 of the specification.

Support for the generating data definitions step of the second wherein clause may be found in paragraph 0066 of the specification.

Independent claim 39 recites:

A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents, by a trading partner, comprising the steps of:

receiving, by the trading partner, a standard data model containing EDI related data for a plurality of transactions;

receiving a manual entry of parameters related to an EDI document format;

generating from the standard data model and the manual entry of parameters, by the trading partner, data definitions for the self-describing markup language corresponding to each transaction of the EDI related data and the received manually entered parameters;

generating self-describing markup language data using the data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model for read in data, a separate data model for read out data, and a map component file,

wherein the step of receiving a manual entry of parameters comprises receiving user input of an EDI standard, a version of the standard, a transaction set, a direction, and mapping rules for the standard data model.

Support for the receiving step may be found in step 505 in Figure 5 of the drawings, and in paragraphs 0077 and 0079 of the specification.

Support for the generating data definitions step may be found in paragraphs 0006, 0007 and 0066 of the specification.

Support for the generating self-describing markup language step may be found in step 305 in Figure 3 of the drawings, and in paragraphs 0067 and 0068 of the specification.

Support for the automatically generating an EDI document step may be found in paragraphs 0071 and 0080 of the specification.

Support for the generating data definitions step of the first wherein clause may be found in paragraphs 0067 and 0068 of the specification.

Support for the generating data definitions step of the second wherein clause may be found in paragraph 0066 of the specification.

Independent claim 49 recites:

A computer implemented method of automatically generating data in a self-describing markup language format from received EDI data, comprising the steps of:

receiving user input of an EDI standard, a version of the standard, and a transaction set in generating the self-describing markup language data definition, and mapping rules for the standard data model;

receiving EDI data from a component;

retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and

automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition,

prior to said receiving step, generating data definitions corresponding to each transaction type from a standard data model of EDI related data,

wherein the generating data definitions step comprises, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file.

Support for the receiving user input step may be found in paragraphs 0006, 0007 and 0066 of the specification.

Support for the receiving EDI data step may be found in Figure 5, step 505 of the drawings, and in the description of that step in the specification.

Support for the generating self-describing markup language step may be found in step 305 in Figure 3 of the drawings, and in paragraphs 0067 and 0068 of the specification.

Support for the retrieving a self-describing markup language step may be found in paragraphs 0071 and 0080 of the specification.

Support for the automatically generating self-describing markup language data step may be found in Figure 5, step 515 of the drawings, and in the description of that step in the specification.

Support for the generating data definitions step may be found in paragraphs 0067 and 0068 of the specification.

Support for the generating data definitions step of the wherein clause may be found in paragraph 0066 of the specification.

Independent claim 58 recites:

A computer program product for automatically generating data in a self-describing markup language format from received EDI data, the computer program product embodied in computer readable media executable by a computer, the computer program product comprising:

- a component for transmitting EDI data;

- a translator that receives a self-describing markup language data definition corresponding to a transaction type of received EDI data;

- wherein the translator that automatically generates the self-describing markup language data based on the received EDI data and the self-describing markup language data definitions,

- wherein the translator receives the self-describing markup language data definition generated by a generator from a standard data model comprising EDI related data for a plurality of transactions, the data definition comprising, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file,

- wherein the generator further comprises a user interface for user input of an EDI standard, a version of the standard, and a transaction set prior to generating the self-describing markup language format.



Support for the component element may be found as "To Network 10" in Figure 1 of the drawings, and in the description of that element in the specification.

Support for the translator element may be found as Element 205A and Element 210B in Figure 2 of the drawings, and in the description of those elements in the specification.

Support for the features in the first wherein clause regarding the translator may be found in Figure 5, step 515 of the drawings, and in the description of that step in the specification.

Support for the features in the second wherein clause regarding the translator may be found in Figure 2 of the drawings (see, for example, Map Component File 223), and in paragraphs 0067 and 0068 of the specification.

Support for the features in the third wherein clause regarding the generator may be found in paragraph 0066 of the specification.

Independent claim 64 recites:

A program code on a computer readable medium that is executable by a computer for automatically generating data in a self-describing markup language data from received EDI data, the program code configured to cause the computer to perform the following steps:

- receiving user input of an EDI standard, a version of the standard, a transaction set in generating the self-describing markup language data definition, and mapping rules for the standard data model;

- receiving EDI data from a component;

- retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and

- automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition,

- prior to said receiving step, generating data definitions corresponding to each transaction type from a standard data model comprising EDI related data for a plurality of transactions,

- wherein the generating data definitions step comprises, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data,

a separate self-describing mark up language data model to read-out data, and a map component file.

Support for the receiving user input step may be found in paragraphs 0006, 0007 and 0066 of the specification.

Support for the receiving EDI data step may be found in Figure 5, step 505 of the drawings, and in the description of that step in the specification.

Support for the generating self-describing markup language step may be found in step 305 in Figure 3 of the drawings, and in paragraphs 0067 and 0068 of the specification.

Support for the retrieving a self-describing markup language step may be found in paragraphs 0071 and 0080 of the specification.

Support for the automatically generating self-describing markup language data step may be found in Figure 5, step 515 of the drawings, and in the description of that step in the specification.

Support for the generating data definitions step may be found in paragraphs 0067 and 0068 of the specification.

Support for the generating data definitions step of the wherein clause may be found in paragraph 0066 of the specification.

## **VI. GROUND OF REJECTION**

In the final Office Action, claims 1-5, 10-14, 19-25, 27, 28, 33-39, 44-49, 51-58, 60-64, and 66-72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application publication No. 2002/0099735 to Schroeder et al. (hereafter "Schroeder") in view of U.S. patent 6,823,495 to Vedula et al. (hereafter "Vedula").

## VII. ARGUMENT

The rejections of presently pending claims 1, 13, 27, 39, 49, 58 and 64 under 35 U.S.C. § 103(a) should be withdrawn because the combined teachings of the cited art of record does not teach or suggest the claimed invention.

On page 4 of the final Office Action, with respect to the rejection of claim 44, whereby the features of claim 44 have been incorporated into its base claim 43 (and whereby the other independent claims under rejection have similar features), its asserts that “paragraph [0039] of Schroeder teaches that a user can choose the translation format.”

While the above statement on its face is essentially correct, it falls well short of the features recited in claim 44 (whereby those features are now recited in claim 43). In particular, claim 43 recites that the step of receiving a manual entry of parameters comprises receiving user input of an EDI standard, a version of the standard, a transaction set, a direction, and mapping rules for the standard data model. Numbered paragraph 0039 of Schroeder merely describes that a recipient trading partner can choose to translate their XML data to a select list of formats defined by the system, whereby at best, this merely teaches the selection of a particular EDI standard and version. It does not teach or suggest the capability of a user to select a particular transaction set, a direction, and mapping rules for the standard data model.

Note the benefits of the presently claimed invention, as described in the specification as follows:

“An advantage of this invention is that data in the EDI format is translated to data in the XML format, and/or data in the XML format is translated to data in the EDI format automatically, easily and quickly. A benefit is that the user does not have to spend significant time creating the complex maps that are required, for example, in other prior art systems. This approach speeds up the process of developing XML/EDI maps and getting them into production use. Another important benefit of this invention is that businesses are able to quickly integrate their EDI applications with newer XML applications related to EDI.” (paragraph 0080 of the specification).

Accordingly, as Vedula does not rectify the above-mentioned deficiencies of Schroeder, as practically admitted in the final Office Action, presently pending independent claim 43 is patentable over the combined teachings of those two references.

Furthermore, with respect to presently pending independent claim 1, whereby the features of canceled claim 2 have been incorporated into that claim, page 4 of the Office Action asserts that “It is noted that the Schroeder generic data maps contain the information necessary to create a custom mapping. Schroeder teaches translation among trading partner formats, it having been implicit that such a translation process requires a custom mapping from source to target formats.” Appellants strongly disagree with this assertion made in the final Office Action.

Presently pending independent claim 1 allows for the claimed data models to be customized. No such customized data models (for read in and read out data) are taught or suggested by Schroeder. In fact, Schroeder’s super map teaches away from this customization by teaching a super map that includes all the data segments and elements for a particular transaction. Again, the ability to allow a user to enter in his/her own data is much different, and not a variant, from an automated system that does not allow such user inputs, whereby the system of Schroeder would not be amenable to the “user inputted” features as recited in claim 1. The comments made on page 4 of the final Office Action that Schroeder’s generic data maps contain information necessary to create a custom mapping is by itself immaterial, since there is no teaching in Schroeder as to any user-inputted feature, but rather Schroeder’s super map teaches away from any user-inputted features.

Accordingly, as Vedula does not rectify the above-mentioned shortcomings of Schroeder, presently pending independent claim 1 is patentable over the cited art of record.

Similarly, with respect to the other independent claims under rejection, which were amended to include the features of their respective dependent claims 2, 33, 51 and 66, the comments made on page 4 of the final Office Action regarding those claims falls well short of the features recited in those claims (now incorporated into their respective base claim), and thus those independent claims are also patentable over the cited art of record.

**VIII. CONCLUSION**

For the aforementioned reasons, claims 1, 13, 27, 39, 49, 58 and 64 are allowable over the cited art of record. As a result, each of the Examiner's grounds for rejection must be reversed.

Respectfully submitted,

Date March 12, 2007

By Phillip J. Articola

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THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED REGARDING THIS APPLICATION UNDER 37 C.F.R. §§ 1.16-1.17, OR CREDIT ANY OVERPAYMENT, TO DEPOSIT ACCOUNT NO. 19-0741. SHOULD NO PROPER PAYMENT BE ENCLOSED HERewith, AS BY A CHECK BEING IN THE WRONG AMOUNT, UNSIGNED, POST-DATED, OTHERWISE IMPROPER OR INFORMAL OR EVEN ENTIRELY MISSING, THE COMMISSIONER IS AUTHORIZED TO CHARGE THE UNPAID AMOUNT TO DEPOSIT ACCOUNT NO. 19-0741. IF ANY EXTENSIONS OF TIME ARE NEEDED FOR TIMELY ACCEPTANCE OF PAPERS SUBMITTED HERewith, APPLICANT HEREBY PETITIONS FOR SUCH EXTENSION UNDER 37 C.F.R. § 1.136 AND AUTHORIZES PAYMENT OF ANY SUCH EXTENSIONS FEES TO DEPOSIT ACCOUNT NO. 19-0741.

**IX. CLAIMS APPENDIX**

A listing of the pending claims is set forth below (“Currently Amended” means that the amendments are being made by way of an Amendment filed concurrently with this Appeal Brief):

1. (Currently Amended) A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents by a trading partner comprising the steps of:

receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;

generating from the standard data model, by the trading partner, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the step of generating data definitions comprises receiving user input of an EDI standard, a version of the standard, a transaction set, and mapping rules for the standard data model.

2.-12. (Cancelled)

13. (Currently Amended) A system for automatically generating Electronic Data Interchange (EDI) documents by a trading partner, the system comprising:

a standard data model comprising EDI related data of a plurality of transactions;

a computer implemented first generator that generates, from the standard data model, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

a computer implemented second generator that generates self-describing markup language data using a data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to the EDI; and

a computer implemented translator that automatically generates an EDI document based on the self-describing mark up language data,

wherein the first generator generates, for each of the plurality of transactions, data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the first generator further comprises a user interface for user input of an EDI standard, a version of the standard, and a transaction set prior to generating the EDI document.

14.-26. (Cancelled)

27. (Currently Amended) Program code on a computer readable medium, that is executable by a computer for generating Electronic Data Interchange (EDI) documents by a trading partner, the program code configured to cause the computer to perform the following steps:

receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;

generating from the standard data model, by the trading partner, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the step of generating data definitions comprises receiving user input of an EDI standard, a version of the standard, a transaction, and mapping rules for the standard data model.

28.-38. (Cancelled)

39. (Currently Amended) A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents, by a trading partner, comprising the steps of:

receiving, by the trading partner, a standard data model containing EDI related data for a plurality of transactions;

receiving a manual entry of parameters related to an EDI document format;

generating from the standard data model and the manual entry of parameters, by the trading partner, data definitions for the self-describing markup language corresponding to each transaction of the EDI related data and the received manually entered parameters;

generating self-describing markup language data using the data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model for read in data, a separate data model for read out data, and a map component file,

wherein the step of receiving a manual entry of parameters comprises receiving user input of an EDI standard, a version of the standard, a transaction set, a direction, and mapping rules for the standard data model.

40.-48. (Cancelled).



49. (Currently Amended) A computer implemented method of automatically generating data in a self-describing markup language format from received EDI data, comprising the steps of:

receiving user input of an EDI standard, a version of the standard, and a transaction set in generating the self-describing markup language data definition, and mapping rules for the standard data model;

receiving EDI data from a component;

retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and

automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition,

prior to said receiving step, generating data definitions corresponding to each transaction type from a standard data model of EDI related data,

wherein the generating data definitions step comprises, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file.

50.-57. (Cancelled)

58. (Currently Amended) A computer program product for automatically generating data in a self-describing markup language format from received EDI data, the computer program product embodied in computer readable media executable by a computer, the computer program product comprising:

a component for transmitting EDI data;

a translator that receives a self-describing markup language data definition corresponding to a transaction type of received EDI data;

wherein the translator that automatically generates the self-describing markup language data based on the received EDI data and the self-describing markup language data definitions,

wherein the translator receives the self-describing markup language data definition generated by a generator from a standard data model comprising EDI related data for a plurality of transactions, the data definition comprising, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file,

wherein the generator further comprises a user interface for user input of an EDI standard, a version of the standard, and a transaction set prior to generating the self-describing markup language format.

59. – 63. (Cancelled)

64. (Currently Amended) A program code on a computer readable medium that is executable by a computer for automatically generating data in a self-describing markup language data from received EDI data, the program code configured to cause the computer to perform the following steps:

receiving user input of an EDI standard, a version of the standard, a transaction set in generating the self-describing markup language data definition, and mapping rules for the standard data model;

receiving EDI data from a component;

retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and

automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition,

prior to said receiving step, generating data definitions corresponding to each transaction type from a standard data model comprising EDI related data for a plurality of transactions,

wherein the generating data definitions step comprises, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file.

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65. – 73. (Cancelled)

**X. EVIDENCE APPENDIX**

No evidence has been submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132.

**XI. RELATED PROCEEDINGS APPENDIX**

Appellants are unaware of any related appeals, interferences, or decisions rendered by a court or the Board.



Atty. Dkt. No. 088305-0142

***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE***

Applicants: James JEANNETTE et al.

Title: AUTOMATED METHOD, SYSTEM, AND SOFTWARE FOR  
TRANSFORMING DATA BETWEEN EXTENSIBLE MARKUP  
LANGUAGE FORMAT AND ELECTRONIC DATA  
INTERCHANGE FORMAT

Appl. No.: 10/023,857

Filing Date: 12/21/2001

Examiner: R. Stevens

Art Unit: 2162

**AMENDMENT ACCOMPANYING APPEAL BRIEF**

**Mail Stop AF**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This communication is responsive to the final Office Action dated October 16, 2006, concerning the above-referenced patent application.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this document.

**Remarks/Arguments** begin on page 8 of this document.

Please amend the application as follows:

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents by a trading partner comprising the steps of:

receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;

generating from the standard data model, by the trading partner, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the step of generating data definitions comprises receiving user input of an EDI standard, a version of the standard, a transaction set, and mapping rules for the standard data model.

2.-12. (Cancelled)

13. (Currently Amended) A system for automatically generating Electronic Data Interchange (EDI) documents by a trading partner, the system comprising:

a standard data model comprising EDI related data of a plurality of transactions;

a computer implemented first generator that generates, from the standard data model, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

a computer implemented second generator that generates self-describing markup language data using a data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to the EDI; and

a computer implemented translator that automatically generates an EDI document based on the self-describing mark up language data,

wherein the first generator generates, for each of the plurality of transactions, data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the first generator further comprises a user interface for user input of an EDI standard, a version of the standard, and a transaction set prior to generating the EDI document.

14.-26. (Cancelled)

27. (Currently Amended) Program code on a computer readable medium, that is executable by a computer for generating Electronic Data Interchange (EDI) documents by a trading partner, the program code configured to cause the computer to perform the following steps:

receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;

generating from the standard data model, by the trading partner, data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;

generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file,

wherein the step of generating data definitions comprises receiving user input of an EDI standard, a version of the standard, a transaction, and mapping rules for the standard data model.

28.-38. (Cancelled)

39. (Currently Amended) A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents, by a trading partner, comprising the steps of:

receiving, by the trading partner, a standard data model containing EDI related data for a plurality of transactions;

receiving a manual entry of parameters related to an EDI document format;

generating from the standard data model and the manual entry of parameters, by the trading partner, data definitions for the self-describing markup language corresponding to each transaction of the EDI related data and the received manually entered parameters;

generating self-describing markup language data using the data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and

automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,

wherein the step of generating data definitions further comprises, for each transaction, generating data definitions for the self-describing markup language, a separate data model for read in data, a separate data model for read out data, and a map component file,

wherein the step of receiving a manual entry of parameters comprises receiving user input of an EDI standard, a version of the standard, a transaction set, a direction, and mapping rules for the standard data model.



40.-48. (Cancelled).

49. (Currently Amended) A computer implemented method of automatically generating data in a self-describing markup language format from received EDI data, comprising the steps of:

receiving user input of an EDI standard, a version of the standard, and a transaction set in generating the self-describing markup language data definition, and mapping rules for the standard data model;

receiving EDI data from a component;

retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and

automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition,

prior to said receiving step, generating data definitions corresponding to each transaction type from a standard data model of EDI related data,

wherein the generating data definitions step comprises, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file.

50.-57. (Cancelled)

58. (Currently Amended) A computer program product for automatically generating data in a self-describing markup language format from received EDI data, the computer program product embodied in computer readable media executable by a computer, the computer program product comprising:

a component for transmitting EDI data;

a translator that receives a self-describing markup language data definition corresponding to a transaction type of received EDI data;

wherein the translator that automatically generates the self-describing markup language data based on the received EDI data and the self-describing markup language data definitions,

wherein the translator receives the self-describing markup language data definition generated by a generator from a standard data model comprising EDI related data for a plurality of transactions, the data definition comprising, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file,

wherein the generator further comprises a user interface for user input of an EDI standard, a version of the standard, and a transaction set prior to generating the self-describing markup language format.

59. – 63. (Cancelled)

64. (Currently Amended) A program code on a computer readable medium that is executable by a computer for automatically generating data in a self-describing markup language data from received EDI data, the program code configured to cause the computer to perform the following steps:

receiving user input of an EDI standard, a version of the standard, a transaction set in generating the self-describing markup language data definition, and mapping rules for the standard data model;

receiving EDI data from a component;

retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and

automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition,

prior to said receiving step, generating data definitions corresponding to each transaction type from a standard data model comprising EDI related data for a plurality of transactions,

wherein the generating data definitions step comprises, for each transaction, a data definition for the self-describing mark up language, a separate EDI data model to read in data, a separate self-describing mark up language data model to read-out data, and a map component file.

65. – 73. (Cancelled)

**REMARKS**

This Amendment should be entered for appeal, since: a) it is believed to place this application in condition for allowance without raising any new issues via claim amendments that would require further consideration and/or search (since the only amendments to the claims are to place dependent claim features into the respective base claims, and canceling all of the other dependent claims).

Based on a telephone call from Applicant's representative to Examiner Stevens on January 8, 2007, Examiner Stevens stated if the dependent claims that were not canceled in the after-final reply filed on December 4, 2006 would be canceled, along with including the amendments to the independent claims as made in that after-final reply, then such an amendment would be entered for purposes of appeal.

This amendment does exactly that, and thus should be entered for appeal.

Respectfully submitted,

Date March 12, 2007

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